

## **IN THE CLAIMS:**

A complete listing of the claims is set forth below. Please amend the claims as follows:

1. **(Currently Amended)** A computer-implemented system for categorizing product data in an electronic commerce transaction, the system comprising:

a global content directory server coupled with one or more seller databases over a network, the global content directory server comprising:

a storage medium stored therein a data association module configured ~~coupled with one or more seller databases and a global content directory server, the data association module operable to:~~

access a first product classification schema, the first schema comprising  
comprising:

a taxonomy comprising a hierarchy of classes for categorizing one or more products, the first schema further comprising products; and

ontologies associated with one or more of the classes, each ontology comprising one or more product attributes, wherein each of the one or more products is associated with a global unique identifier;

access target data to be associated with the first schema, the target data organized according to a second product classification schema;

determine one or more classes of the first schema with which at least a portion of the target data is associated based on a comparison between the target data and the product attributes of the ontologies of the first schema or between the target data and values for one or more of the product attributes of the ontologies of the first schema;

associate the at least a portion of the target data with one or more classes of the first schema in response to determining, based on the comparison, the one or more classes of the first schema with which the at least a portion of the target data is associated; and

store the values for one or more of the product attributes of the ontologies of the first schema with which the target data is compared in the one or more seller databases.

2. **(Previously Presented)** The system of Claim 1, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated comprises identifying a portion of the target data including the name or an equivalent name of a product attribute included in the ontologies of these one or more classes of the first schema.

3. **(Previously Presented)** The system of Claim 1, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated comprises identifying a portion of the target data including values that match or are similar to values for a product attribute included in the ontologies of these one or more classes of the first schema.

4. **(Previously Presented)** The system of Claim 1, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated comprises identifying a portion of the target data including a range of values that matches or is similar to a range of values for a product attribute included in the ontologies of these one or more classes of the first schema.

5. **(Previously Presented)** The system of Claim 1, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated comprises identifying a portion of the target data including symbols that match or are similar to symbols associated with values for a product attribute included in the ontologies of these one or more classes of the first schema.

6. **(Previously Presented)** The system of Claim 1, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated comprises identifying a portion of the target data having formatting that matches or is similar to formatting of values for a product attribute included in the ontologies of these one or more classes of the first schema.

7. **(Previously Presented)** The system of Claim 1, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated comprises using vector space analysis to identify multiple portions of the target data including values that correspond to values for multiple product attributes included in the ontologies of these one or more classes of the first schema.

8. **(Previously Presented)** The system of Claim 1, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated comprises using statistical correlation techniques to identify portions of the target data including values that correspond to values for a product attribute included in the ontologies of these one or more classes of the first schema.

9. **(Previously Presented)** The system of Claim 1, wherein the values in the seller databases being identified by one or more pointers associated with one or more classes of the first schema.

10. **(Previously Presented)** The system of Claim 1, wherein associating the at least a portion of the target data with one or more classes of the first schema comprises associating one or more pointers to the target data with the one or more classes of the first schema.

11. **(Previously Presented)** The system of Claim 1, wherein associating the at least a portion of the target data with one or more classes of the first schema comprises associating one or more pointers to specific portions of the target data with one or more product attributes included in the ontology of the one or more classes of the first schema.

12. **(Previously Presented)** A computer-implemented method for categorizing product data in an electronic commerce transaction, the method performed using a computer system comprising one or more processing units and one or more memory units, the method comprising:

accessing a first product classification schema, the first schema comprising a taxonomy comprising a hierarchy of classes for categorizing one or more products, the first schema further comprising ontologies associated with one or more of the classes, each ontology comprising one or more product attributes, wherein each of the one or more products is associated with a global unique identifier;

accessing target data to be associated with the first schema, the target data organized according to a second product classification schema;

determining one or more classes of the first schema with which at least a portion of the target data is associated based on a comparison between the target data and the product attributes of the ontologies of the first schema or between the target data and values for one or more of the product attributes of the ontologies of the first schema;

associating the at least a portion of the target data with one or more classes of the first schema in response to determining, based on the comparison, the one or more classes of the first schema with which the at least a portion of the target data is associated; and

storing the values for one or more of the product attributes of the ontologies of the first schema with which the target data is compared in one or more seller databases.

13. **(Previously Presented)** The method of Claim 12, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated comprises identifying a portion of the target data including the name or an equivalent name of a product attribute included in the ontologies of these one or more classes of the first schema.

14. **(Previously Presented)** The method of Claim 12, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated comprises identifying a portion of the target data including values that match or are similar to values for a product attribute included in the ontologies of these one or more classes of the first schema.

15. **(Previously Presented)** The method of Claim 12, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated comprises identifying a portion of the target data including a range of values that matches or is similar to a range of values for a product attribute included in the ontologies of these one or more classes of the first schema.

16. **(Previously Presented)** The method of Claim 12, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated comprises identifying a portion of the target data including symbols that match or are similar to symbols associated with values for a product attribute included in the ontologies of these one or more classes of the first schema.

17 **(Previously Presented)** The method of Claim 12, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated comprises identifying a portion of the target data having formatting that matches or is similar to formatting of values for a product attribute included in the ontologies of these one or more classes of the first schema.

18. **(Previously Presented)** The method of Claim 12, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated comprises using vector space analysis to identify multiple portions of the target data including values that correspond to values for multiple product attributes included in the ontologies of these one or more classes of the first schema.

19. **(Previously Presented)** The method of Claim 12, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated comprises using statistical correlation techniques to identify portions of the target data including values that correspond to values for a product attribute included in the ontologies of these one or more classes of the first schema.

20. **(Previously Presented)** The method of Claim 12, wherein the values in the seller databases being identified by one or more pointers associated with one or more classes of the first schema.

21. **(Previously Presented)** The method of Claim 12, wherein associating the at least a portion of the target data with one or more classes of the first schema comprises associating one or more pointers to the target data with the one or more classes of the first schema

22. **(Previously Presented)** The method of Claim 12, wherein associating the at least a portion of the target data with one or more classes of the first schema comprises associating one or more pointers to specific portions of the target data with one or more product attributes included in the ontology of the one or more classes of the first schema.

23. **(Previously Presented)** Software for categorizing product data in an electronic commerce transaction, the software being embodied in a computer-readable storage medium and when executed operable to:

access a first product classification schema, the first schema comprising a taxonomy comprising a hierarchy of classes for categorizing one or more products, the first schema further comprising ontologies associated with one or more of the classes, each ontology comprising one or more product attributes, wherein each of the one or more products is associated with a global unique identifier;

access target data to be associated with the first schema, the target data organized according to a second product classification schema;

determine one or more classes of the first schema with which at least a portion of the target data is associated based on a comparison between the target data and the product attributes of the ontologies of the first schema or between the target data and values for one or more of the product attributes of the ontologies of the first schema;

associate the at least a portion of the target data with one or more classes of the first schema in response to determining, based on the comparison, the one or more classes of the first schema with which the at least a portion of the target data is associated; and

store the values for one or more of the product attributes of the ontologies of the first schema with which the target data is compared in one or more seller databases.

24. **(Previously Presented)** The software of Claim 23, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated comprises identifying a portion of the target data including the name or an equivalent name of a product attribute included in the ontologies of these one or more classes of the first schema.



25. **(Previously Presented)** The software of Claim 23, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated comprises identifying a portion of the target data including values that match or are similar to values for a product attribute included in the ontologies of these one or more classes of the first schema.

26. **(Previously Presented)** The software of Claim 23, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated comprises identifying a portion of the target data including a range of values that matches or is similar to a range of values for a product attribute included in the ontologies of these one or more classes of the first schema.

27. **(Previously Presented)** The software of Claim 23, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated comprises identifying a portion of the target data including symbols that match or are similar to symbols associated with values for a product attribute included in the ontologies of these one or more classes of the first schema.

28. **(Previously Presented)** The software of Claim 23, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated comprises identifying a portion of the target data having formatting that matches or is similar to formatting of values for a product attribute included in the ontologies of these one or more classes of the first schema.

29. **(Previously Presented)** The software of Claim 23, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated comprises using vector space analysis to identify multiple portions of the target data including values that correspond to values for multiple product attributes included in the ontologies of these one or more classes of the first schema.

30. **(Previously Presented)** The software of Claim 23, wherein determining one or more classes of the first schema with which the at least a portion of the target data is associated comprises using statistical correlation techniques to identify portions of the target data including values that correspond to values for a product attribute included in the ontologies of these one or more classes of the first schema.

31. **(Previously Presented)** The software of Claim 23, wherein the values in the seller databases being identified by one or more pointers associated with one or more classes of the first schema.

32. **(Previously Presented)** The software of Claim 23, wherein associating the at least a portion of the target data with one or more classes of the first schema comprises associating one or more pointers to the target data with the one or more classes of the first schema

33. **(Previously Presented)** The software of Claim 23, wherein associating the at least a portion of the target data with one or more classes of the first schema comprises associating one or more pointers to specific portions of the target data with one or more product attributes included in the ontology of the one or more classes of the first schema.

34. **(Currently Amended)** A computer-implemented system for categorizing product data in an electronic commerce transaction, the system comprising:

a global content directory server coupled with one or more seller databases over a network, the global content directory server comprising:

means for accessing a first product classification schema, the first schema comprising a taxonomy comprising a hierarchy of classes for categorizing one or more products, the schema further comprising ontologies associated with one or more of the classes, each ontology comprising one or more product attributes, wherein each of the one or more products is associated with a global unique identifier;

means for accessing target data to be associated with the first schema, the target data organized according to a second product classification schema;

means for determining one or more classes of the first schema with which at least a portion of the target data is associated based on a comparison between the target data and the product attributes of the ontologies of the first schema or between the target data and values for one or more of the product attributes of the ontologies of the first schema;

means for associating the at least a portion of the target data with one or more classes of the first schema in response to determining, based on the automatic comparison, the one or more classes of the first schema with which the at least a portion of the target data is associated; and

means for storing the values for one or more of the product attributes of the ontologies of the first schema with which the target data is compared in one or more seller databases.

35. **(Currently Amended)** A computer-implemented system for categorizing product data in an electronic commerce transaction, the system comprising:

a global content directory server coupled with one or more seller databases over a network, the global content directory server comprising:

a storage medium stored therein a data association module configured ~~coupled with one or more seller databases and a global content directory server, the data association module operable to:~~

access a first product classification schema, the first schema comprising a taxonomy comprising a hierarchy of classes for categorizing one or more products, the first schema further comprising ontologies associated with one or more of the classes, each ontology comprising one or more product attributes, wherein each of the one or more products is associated with a global unique identifier;

access target data to be associated with the first schema, the target data organized according to a second product classification schema;

determine one or more classes of the first schema with which at least a portion of the target data is associated based on a comparison between the target data and the product attributes of the ontologies of the first schema or between the target data and values for one or more of the product attributes of the ontologies of the first schema;

associate the at least a portion of the target data with one or more classes of the first schema in response to determining, based on the automatic comparison, the one or more classes of the first schema with which the at least a portion of the target data is associated, the target data being associated with the classes of the first schema using one or more pointers to the target data; and

store the values for one or more of the product attributes of the ontologies of the first schema with which the target data is compared in the one or more seller databases.

36. **(Previously Presented)** A computer-implemented method for categorizing product data in an electronic commerce transaction, the method performed using a computer system comprising one or more processing units and one or more memory units, the method comprising:

accessing a first product classification schema, the first schema comprising a taxonomy comprising a hierarchy of classes for categorizing one or more products, the first schema further comprising ontologies associated with one or more of the classes, each ontology comprising one or more product attributes, wherein each of the one or more products is associated with a global unique identifier;

accessing target data to be associated with the first schema, the target data organized according to a second product classification schema;

determining one or more classes of the first schema with which at least a portion of the target data is associated based on a comparison between the target data and the product attributes of the ontologies of the first schema or between the target data and values for one or more of the product attributes of the ontologies of the first schema;

associating the at least a portion of the target data with one or more classes of the first schema in response to determining, based on the comparison, the one or more classes of the first schema with which the at least a portion of the target data is associated, the target data being associated with the classes of the first schema using one or more pointers to the target data; and

storing the values for one or more of the product attributes of the ontologies of the first schema with which the target data is compared in one or more seller databases.

37. **(Previously Presented)** Software for categorizing product data in an electronic commerce transaction, the software being embodied in a computer-readable storage\_medium and when executed operable to:

access a first product classification schema, the first schema comprising a taxonomy comprising a hierarchy of classes for categorizing one or more products, the first schema further comprising ontologies associated with one or more of the classes, each ontology comprising one or more product attributes, wherein each of the one or more products is associated with a global unique identifier;

access target data to be associated with the first schema, the target data organized according to a second product classification schema;

determine one or more classes of the first schema with which at least a portion of the target data is associated based on a comparison between the target data and the product attributes of the ontologies of the first schema or between the target data and values for one or more of the product attributes of the ontologies of the first schema;

associate the at least a portion of the target data with one or more classes of the first schema in response to determining, based on the comparison, the one or more classes of the first schema with which at the least a portion of the target data is associated, the target data being associated with the classes of the first schema using one or more pointers to the target data; and

store the values for one or more of the product attributes of the ontologies of the first schema with which the target data is compared in one or more seller databases.